

AMENDMENTS TO THE CLAIMS:

Claims 1-15 are canceled without prejudice or disclaimer. Claims 16-54 are added. The following is the status of the claims of the above-captioned application, as amended.

Claims 1-15 (Canceled).

Claim 16 (New). An isolated protease variant comprising an insertion, substitution or deletion of one of the amino acid residues K,H,R,E,D,Q,N,C,V,L,I,P,M,F,W,Y,G,A,S,T at one or more of positions 62, 68, 97, 98, 99, 106, 131, 170, 245, and 252 in combination with at least one modification selected from the group consisting of:

*0AQSVPWG,
A1T,V,
Q2L,
S3T,A,L,
V4L,A,
I8V,T,
S9G,D,R,K,L,V,
R10H,K,
V11A,
Q12D,
A13V,
P14S,T,D,A,M,V,K,Q,L,H,R,I,
A15M,T,
A16P,
H17R,
N18S,H,
R19W,K,L,F,G,I,
G20*,R,A,
L21F,LP,LW,LA,LG,
T22S,A,K,TV,TG,TL,TW,TV,G,L,TY,
G23S,
S24P,
K27R,

V28I,
V30I,
I35T,V,
T38S,
P40L,
N43D,
R45H,K,
G46D,
A48T,
S49N,
F50S,
V51A,I,D,
P52V,A,
P55S,A,
S57P,
G61E,D,S,R,GP,
T71A,
I72V,
L76I,
N76S,D,
N77S,
S78T,
V81A,
A85T,
S87C,
A88V,T,
E89G,
K94N,
L96LA,LG,
G100GE,
S101SA,SK,
G102D,S,
I107T,V,M,

A108V,T,S,
L111I,V,
A114V,
N116S,D,
G118D,
M119L,I,V,A,S,
H120N,D,Q,K,E,Y,S,
V121A,
L124C,
L126I,
G127E,
S128N,I,G,C,
P129PSN,T,E,D,S,N,A,
S130P,T,C,*,
S132G,T,
A133ASA,
T134A,
Q137H,E,D,
A138G,V,
V139L,I,
N140D,K,
T143A,
S144D,N,P,
R145G,
V150I,
A151V,G,
A152P,
A158T,V,C,E,L,D,M,
G160A,D,
S163G,C,N,A,
Y167K,A,I,
A168G,
A169G,

Y171C,
A172V,
N173D,
A174V,
M175L,I,V,A,S,T,
N183D,
N184D,S,
N185S,D,
R186L,C,H,
S188G,
S190A,
Y192H,
G195F,E,
V203S,A,L,Q,M,F,I,
N204T,D,S,
Q206L,
Y209C,H,
G211D,
S212N,L,
T213A,
Y214C,H,
N218D,S,
M222L,I,V,A,S,
A223G,
T224A,S,
A228T,
A230V,
V234I,
K237R,
N238D,
P239T,S,
S240F,
S242T,

V244I,M,A,
K251E,R,
A254S,
T255A,S,
S256N,R,G,
L257G,
G258K,
S259A,N,G,
T260A,R,
N261D,
L262S,Q,V,
Y263H,F,
G264E,
S265G,R,N,
V268L,I,
N269T,
N296K,
E271A, and
T274S,L,A,R;

wherein the variant has protease activity and each position corresponds to a position of the amino acid sequence of subtilisin BPN' shown in SEQ ID NO: 1.

Claim 17 (New). The protease variant of claim 16, comprising an insertion, substitution or deletion of one of the amino acid residues K,H,R,E,D,Q,N,C,V,L,I,P,M,F,W,Y,G,A,S,T at position 62.

Claim 18 (New). The protease variant of claim 17, comprising a substitution of one of the amino acid residues K,H,R,E,D,Q,N,C,V,L,I,P,M,F,W,Y,G,A,S,T at position 62.

Claim 19 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

*DAQSVPWG,
A1T,V,

Q2L,
S3T,A,L, and
V4L,A.

Claim 20 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

I8V,T,
S9G,D,R,K,L,V,
R10H,K,
V11A, and
Q12D.

Claim 21 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

A13V,
P14S,T,D,A,M,V,K,Q,L,H,R,I,
A15M,T,
A16P, and
H17R.

Claim 22 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

N18S,H,
R19W,K,L,F,G,I,
G20*,R,A,
L21F,LP,LW,LA,LG, and
T22S,A,K,TV,TG,TL,TW,TV,G,L,TY.

Claim 23 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

G23S,
S24P,
K27R,

V28I, and
V30I.

Claim 24 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

I35T,V,
T38S,
P40L,
N43D, and
R45H,K.

Claim 25 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

G46D,
A48T,
S49N,
F50S, and
V51A,I,D.

Claim 26 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

P52V,A,
P55S,A,
S57P,
G61E,D,S,R,GP, and
T71A.

Claim 27 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

I72V,
L75I,
N76S,D,

N77S, and
S78T.

Claim 28 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

V81A,
A85T,
S87C,
A88V,T, and
E89G.

Claim 29 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

K94N,
L96LA,LG,
G100GE,
S101SA,SK, and
G102D,S.

Claim 30 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

I107T,V,M,
A108V,T,S,
L111I,V,
A114V, and
N116S,D.

Claim 31 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

G118D,
M119L,I,V,A,S,
H120N,D,Q,K,E,Y,S,

V121A, and
L124C.

Claim 32 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

L126I,
G127E,
S128N,I,G,C,
P129PSN,T,E,D,S,N,A, and
S130P,T,C,*.

Claim 33 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

S132G,T,
A133ASA,
T134A,
Q137H,E,D, and
A138G,V.

Claim 34 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

V139L,I,
N140D,K,
T143A,
S144D,N,P, and
R145G.

Claim 35 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

V150I,
A151V,G,
A152P,

A158T,V,C,E,L,D,M, and
G160A,D.

Claim 36 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

S163G,C,N,A,
Y167K,A,I,
A168G,
A169G, and
Y171C.

Claim 37 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

A172V,
N173D,
A174V,
M175L,I,V,A,S,T, and
N183D.

Claim 38 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

N184D,S,
N185S,D,
R186L,C,H,
S188G, and
S190A.

Claim 39 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

Y192H,
G195F,E,
V203S,A,L,Q,M,F,I,

N204T,D,S, and
Q206L.

Claim 40 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

Y209C,H,
G211D,
S212N,L,
T213A, and
Y214C,H.

Claim 41 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

N218D,S,
M222L,I,V,A,S,
A223G,
T224A,S, and
A228T.

Claim 42 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

A230V,
V234I,
K237R,
N238D, and
P239T,S.

Claim 43 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

S240F,
S242T,
V244I,M,A,

K251E,R, and
A254S.

Claim 44 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

T255A,S,
S256N,R,G,
L257G,
G258K, and
S259A,N,G.

Claim 45 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

T260A,R,
N261D,
L262S,Q,V,
Y263H,F, and
G264E.

Claim 46 (New). The protease variant of claim 17, comprising one modification selected from the group consisting of:

S265G,R,N,
V268L,I,
N269T,
N296K,
E271A, and
T274S,L,A,R.

Claim 47 (New). The protease variant of claim 17, comprising:

Q2L+N62D,
S3L+N62D+S163A+S190A,
S3T+P14Q+A15M+R19K+N62D+S144D,
V4L+N62D+E89G,

S9L+A15T+T22TV+V139L+Q245F+L262S,
S9R+A13V+A15T+I35V+N62D+Q245F,
S9R+A15T+G20*+L21F+P52T+N62D+Q245R,
S9R+A15T+G20*+L21F+N62D+Q245N,
S9R+A15T+G20*+L21F+N62D+Q245R,
S9R+A15T+G20*+L21F+N62D+Q245R+S259G,
S9R+A15T+G20*+L21F+N62E+Q245R,
S9R+A15T+G20*+L21F+*62aS+N218D+Q245R,
S9R+A15T+T22A+N62D,
S9R+A15T+T22TG+N62D+V139L+Q245G,
S9R+A15T+T22TG+N62D+V139L+Q245S,
S9R+A15T+T22TG+N62D+V139L+Q245V,
S9R+A15T+T22TL+N62D+I107V+V139L+Q245W,
S9R+A15T+T22TL+N62D+Q245W,
S9R+A15T+N62D+H120N+P131T,
S9R+A15T+N62D+Q245R+N252M,
S9R+A15T+N62D+Q245W+N252S,
S9R+A15T+N62D+Q245W+N252V,
S9R+A15T+N62ND+V139L+Q245E,
S9R+A15T+N62ND+V139L+N261D,
S9R+A15T+N62NG+Q245T,
S9R+A15T+N62S+H120N+P131T+N218D,
R10H+N62D,
V11A+N62DE,
A15M+V30I+N62D+S99N+L111I+V244A+S265N,
N18S+N62D+I107T+A254S,
G20R+N62D+V244I+Q245W+N252E,
I35T+N62D,
S49N+N62D,
S57P+N62ND,
G61R+N62D,
N62D+I72V,
N62D+V81A+Q245R,

N62D+V121A,
N62D+P131F+A172V,
N62D+V139I+N183D+N185S+V203I+Q245R+L262S,
N62D+N140K+T143A+S144D,
N62D+R145G,
N62D+V150I,
N62D+A151G,
N62D+A169G+V203I+Q245R,
N62D+S188G+K251R,
N62D+Y214H+K237R,
N62D+N238D,
N62D+Q245A+N252G+S265G,
N62D+S265G,
N62ND+N184S+S256G,
N62NE, or
N62NE+V234I.

Claim 48 (New). The protease variant of claim 16, comprising the following substitutions:
S101G+S103A+V104I+G159D+A232V+Q236H+Q245R+N248D+N252K.

Claim 49 (New). The protease variant of claim 16, which has ten modifications.

Claim 50 (New). The protease variant of claim 16, which is variant of a subtilase belonging to sub-group I-S1.

Claim 51 (New). The protease variant of claim 16, which is a variant of a subtilase belonging to sub-group I-S2.

Claim 52 (New). The protease variant of claim 16, which is a variant of subtilisin 309.

Claim 53 (New). A cleaning or detergent composition, comprising a protease variant of claim 16 and a surfactant.

Claim 54 (New). A composition of claim 53, which additionally comprises one or more of an amylase, cellulase, cutinase, esterase, beta-galactosidase, glycoamylase, hemicellulase, lactase, ligninase, lipase, polygalacturonase, and protease.